

# Cyber Update 2021

CAANZ

Focus on Management

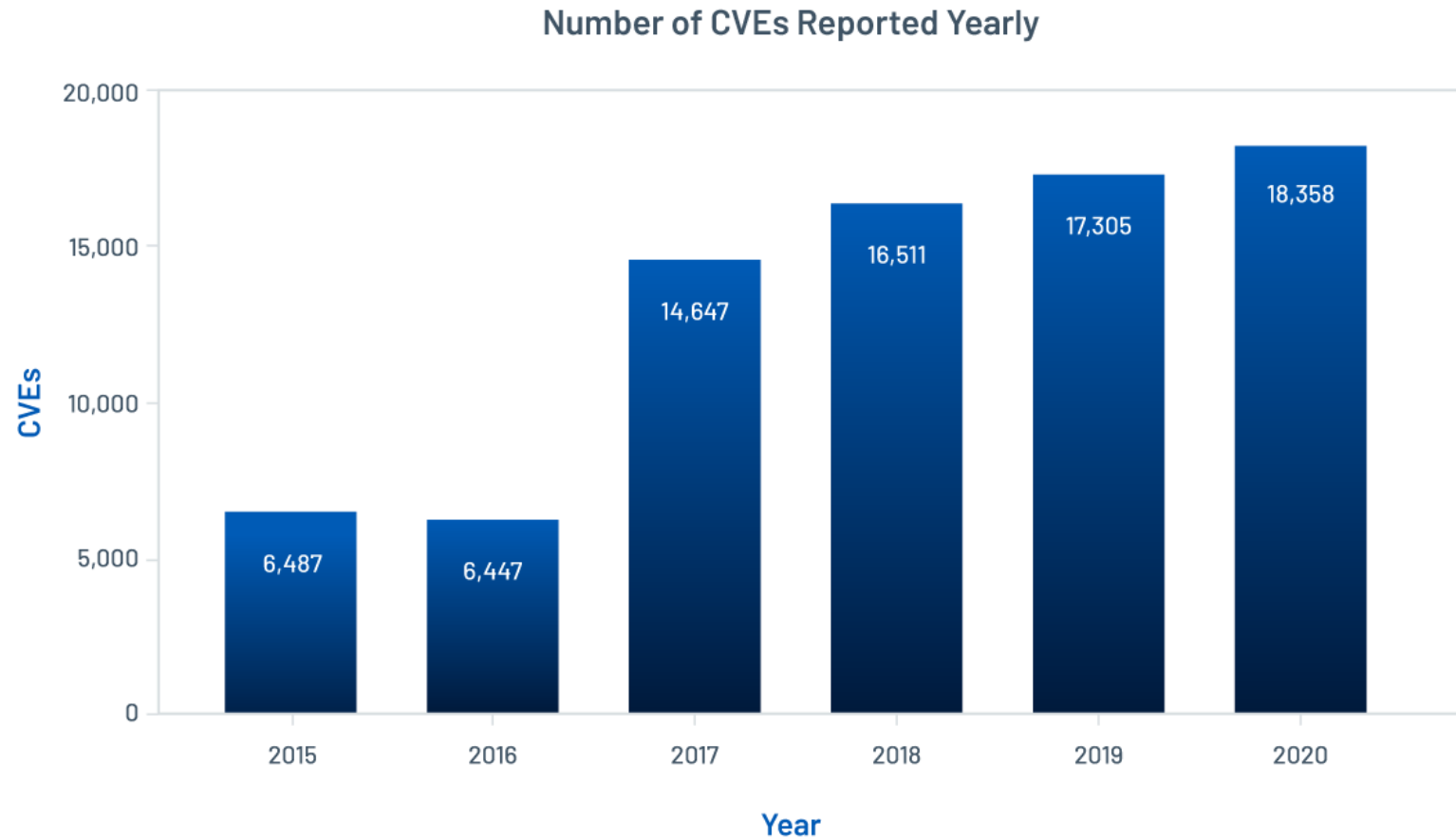
July 2021



# Agenda

1. Cyber Incident Response - A brief overview
2. Recent case studies
3. Incident prevention and Response
4. Open forum

# Landscape - Vulnerabilities



# Landscape - CERT NZ

Table 2: Types of loss

**11%** Financial loss

This not only includes money lost as a direct result of the incident, but also includes the cost of recovery, like the cost of contracting IT security services or investing in new security systems following an incident (Q1 and Q2 2020: 16%).

**0%** Reputational loss

Damage to the reputation of an individual or organisation as a result of the incident (Q1 and Q2 2020: 1%).

**2%** Data loss

Loss or unauthorised copying of data, business records, personal records and intellectual property (Q1 and Q2 2020: 3%).

**0%** Technical damage

Impacts on services like email, phone systems or websites, resulting in disruption to a business or organisation (Q1 and Q2 2020: 0%).

**1%** Operational impacts

The time, staff and resources spent on recovering from an incident, taking people away from normal business operations (Q1 and Q2 2020: 1%).

**1%** Other

Includes types of loss not covered in the other categories (Q1 and Q2 2020: 1%).

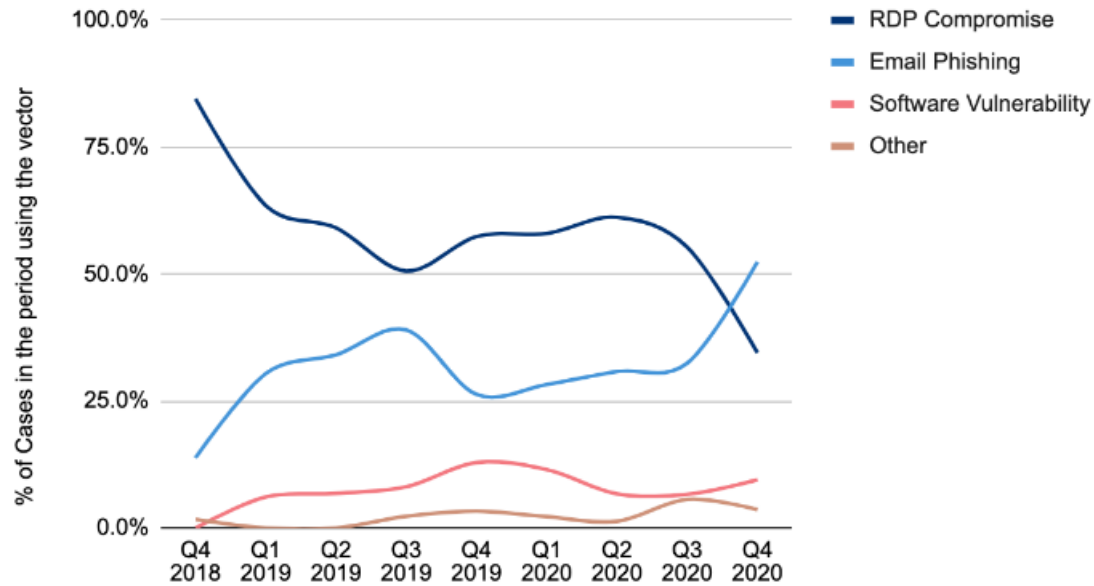
# Landscape - Data Breach



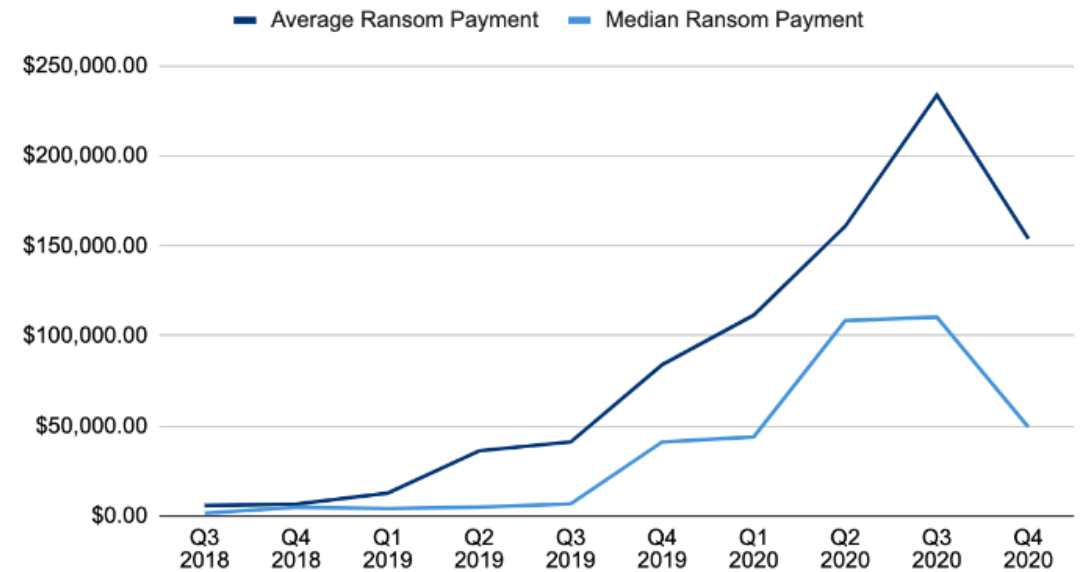
Source - <https://www.ibm.com/security/digital-assets/cost-data-breach-report>

# Landscape - Ransomware

## Ransomware Attack Vectors



## Ransom Payments By Quarter



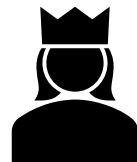
# Privacy Act 2020

- The Privacy Act replaces 27 year old legislation and implements a number of the changes adopted in comparable jurisdictions, such as the EU, Australia, and various US states.
- These significant reforms will change the way organisations in New Zealand manage privacy issues and data security.

• ***Mandatory notifications for privacy breaches***



***Increased powers for the Privacy Commissioner***



• ***Controls on disclosure of information overseas***



• ***Criminal offences***



• ***Extra-territorial scope***



# Serious Harm

## **113 Assessment of likelihood of serious harm being caused by privacy breach**

When an agency is assessing whether a privacy breach is likely to cause serious harm in order to decide whether the breach is a notifiable privacy breach, the agency must consider the following:

- (a) any action taken by the agency to reduce the risk of harm following the breach:
- (b) whether the personal information is sensitive in nature:
- (c) the nature of the harm that may be caused to affected individuals:
- (d) the person or body that has obtained or may obtain personal information as a result of the breach (if known):
- (e) whether the personal information is protected by a security measure:
- (f) any other relevant matters.





# Case Studies





# Incident prevention and Response



# NIST CSF Framework



# CIS Controls



V7.1

## Basic

- 1 Inventory and Control of Hardware Assets
- 2 Inventory and Control of Software Assets
- 3 Continuous Vulnerability Management
- 4 Controlled Use of Administrative Privileges
- 5 Secure Configuration for Hardware and Software on Mobile Devices, Laptops, Workstations and Servers
- 6 Maintenance, Monitoring and Analysis of Audit Logs

## Foundational

- 7 Email and Web Browser Protections
- 8 Malware Defenses
- 9 Limitation and Control of Network Ports, Protocols and Services
- 10 Data Recovery Capabilities
- 11 Secure Configuration for Network Devices, such as Firewalls, Routers and Switches
- 12 Boundary Defense
- 13 Data Protection
- 14 Controlled Access Based on the Need to Know
- 15 Wireless Access Control
- 16 Account Monitoring and Control

## Organizational

- 17 Implement a Security Awareness and Training Program
- 18 Application Software Security
- 19 Incident Response and Management
- 20 Penetration Tests and Red Team Exercises



# Training





# Open Forum



# Thank you

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